



Maryland's BMPs for Timber Harvest Operations

Two forested watersheds located on *Sugarloaf Mountain* were monitored from August 1995 until July 1999 as part of a paired watershed study to evaluate the effectiveness of Maryland's Best Management Practices (BMPs) for timber harvest operations.

The study was designed to test the hypothesis that forest harvest operations have no long term significant impacts on stream benthos, temperature, and suspended sediment if forestry BMPs are implemented.

One watershed was designated as the **treatment watershed**, which was partially harvested after a one year calibration period. The second watershed was designated as a **control**. No harvesting or other manmade disturbance took place in the control.

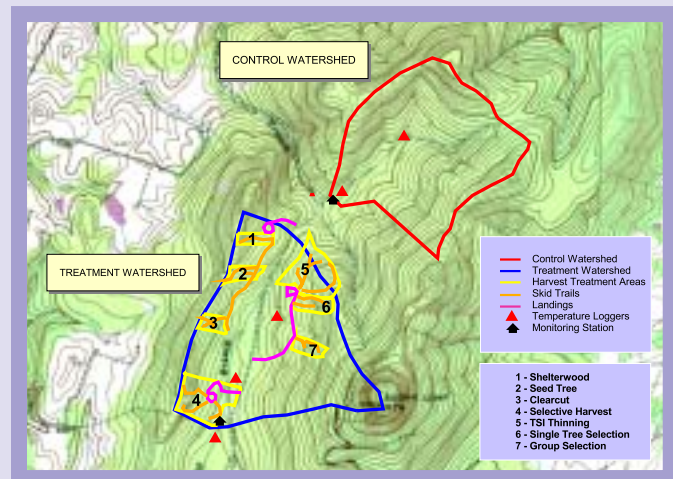
Monitoring stations were established on the lower reaches of both watersheds. Biweekly baseflow and storm water samples were collected at each station and analyzed for **total suspended solids**. Automated **temperature** meters were installed in both watersheds, and **benthic macroinvertebrate** samples were taken each spring and fall.

Analysis of total suspended solids indicated no significant change between the calibration period and the treatment period. Stream temperature and benthic macroinvertebrate populations also did not indicate a significant change as a result of the harvesting, indicating that the BMPs were effective.

BMPs used on this project were truck haul roads, skid trails, landings, streamside forest buffers, and stream crossings.

Location: Frederick County, MD
Sugarloaf Mountain

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Portable 20 foot timber bridge is installed temporarily in the treatment watershed (Furnace Branch).



The portable bridge is removed post harvest and streambanks are stabilized by seeding.

Scientific instrumentation used to monitor total suspended solids (TSS), flow, and temperature.

